



west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475 • FAX: (304) 926-0479

Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov

June 14, 2017

Michael P. Nau
#74 Catalyst Drive
Belmont, WV 26134

Re: Axens North America, Inc.
Willow Island Plant
Permit No. R13-2384A
Plant ID No. 073-00023

Dear Mr. Nau:

Your application for a permit as required by Section 5 of 45CSR13 - "Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permit, General Permit, and Procedures for Evaluation" has been approved. The enclosed permit R13-2384A is hereby issued pursuant to Subsection 5.7 of 45CSR13. Please be aware of the notification requirements in the permit which pertain to commencement of construction, modification, or relocation activities; startup of operations; and suspension of operations.

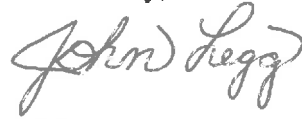
The source is a non-major, deferred Title V source (45CSR30).

In accordance with 45CSR30- Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

Should you have any questions or comments, please contact me at (304) 926-0499, extension 1257.

Sincerely,

A handwritten signature in black ink that reads "John Legg". The signature is fluid and cursive, with the first name "John" and last name "Legg" clearly distinguishable.

John Legg
Permit Writer

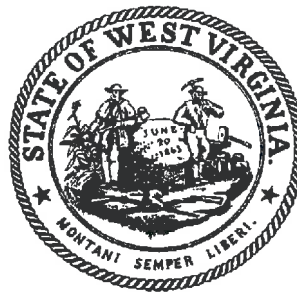
Enclosures

c: Adam Strimer, Axens North America, Inc.
Astrimer@axensna.com

Rick Wilson, TRC Environmental
Rwilson@trcsolutions.com

MNau@axensna.com

Permit to Update



R13-2384A

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Axens North America, Inc.
Willow Island Facility
073-00023

A handwritten signature in blue ink, which appears to read "William F. Durham", is written over a horizontal line.

William F. Durham
Director

Issued: June 14, 2017

This permit will supercede and replace Permit R13-2384.

Facility Location: Pleasants County, West Virginia
Mailing Address: #74 Catalyst Drive, Belmont, WV 26134-9749
Facility Description: Catalyst Plant
NAICS Codes: 325180 – Other Basic Inorganic Chemical Manufacturing
UTM Coordinates: 473.42 km Easting • 4,356.22 km Northing • Zone 17
Permit Type: Class II Administrative Update
Description of Change: Replace existing East and West Impregnator Tray Drying Ovens with a new Fluid Bed Dryer (101-350) and Dust Collector (301-310); remove North and South CPA Reactors.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

This permit does not affect 45CSR30 applicability, the source is a nonmajor source subject to 45CSR30.

Table of Contents

1.0.	Emission Units	4
2.0.	General Conditions	6
2.1.	Definitions	6
2.2.	Acronyms	6
2.3.	Authority	7
2.4.	Term and Renewal.....	7
2.5.	Duty to Comply	7
2.6.	Duty to Provide Information	7
2.7.	Duty to Supplement and Correct Information	8
2.8.	Administrative Permit Update	8
2.9.	Permit Modification	8
2.10.	Major Permit Modification.....	8
2.11.	Inspection and Entry.....	8
2.12.	Emergency.....	8
2.13.	Need to Halt or Reduce Activity Not a Defense.....	9
2.14.	Suspension of Activities	9
2.15.	Property Rights.....	9
2.16.	Severability.....	10
2.17.	Transferability	10
2.18.	Notification Requirements.....	10
2.19.	Credible Evidence	10
3.0.	Facility-Wide Requirements.....	11
3.1.	Limitations and Standards	11
3.2.	Monitoring Requirements.....	11
3.3.	Testing Requirements.....	11
3.4.	Recordkeeping Requirements.....	12
3.5.	Reporting Requirements.....	13
4.0.	Source-Specific Requirements	15
4.1.	Limitations and Standards	15
4.2.	Monitoring Requirements.....	19
4.3.	Testing Requirements.....	20
4.4.	Recordkeeping Requirements.....	20
4.5.	Reporting Requirements.....	21
	CERTIFICATION OF DATA ACCURACY	22

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
101-350	046C	Fluid Bed Dryer	2017	3.0 MM Btu/hr	Dryer Dust Collector (301-310)
101-360	054E	Feed Hopper	2017	71 cu ft	None
101-370	054E	Vibrating Feeder	2017	Varies	None
201-20	031C	Extrudate Dump Hopper	1966	Varies	Non-platinum Dust Collector (201-43-1)
201-22	031C	Screener #3	1966	Varies	Non-platinum Dust Collector (201-43-1)
201-23	031C	Bucket Elevator #3	1966	Varies	Non-platinum Dust Collector (201-43-1)
201-24	031C	Extrudate Feed Hopper	1966	Varies	Non-platinum Dust Collector (201-43-1)
201-25A	054E	Impregnation Vessel A	1966	265 gallons	None
201-25B	054E	Impregnation Vessel B	1966	265 gallons	None
201-25C	054E	Impregnation Vessel C	1966	265 gallons	None
201-25D	054E	Impregnation Vessel D	1974	265 gallons	None
201-25E	054E	Impregnation Vessel E	2000	265 gallons	None
201-25F	054E	Impregnation Vessel F	2000	265 gallons	None
201-28	034E (combustion vent) 034S (process vent)	No. 4 Calciner	1966	1.4 MM Btu/hr	No. 4 Wet Scrubber (201-28S)
201-28H	036C	Calciner Feed Hopper	1966	Varies	Platinum Dust Collector (151-13-1)
201-35	036C	Final Product Hopper & Product Packaging Station	1966	Varies	Platinum Dust Collector (151-13-1)
201-38	T72E	Nitric Acid Storage Tank	1966	3,310 gallons	Vapor Return Line (used during tank filling)
201-56	036C	Screener #4	1966	Varies	Platinum Dust Collector (151-13-1)

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
201-82C	055E	Mother Liquor Charge Tank	2004	1,011 gallons	None
201-255	054E	Vibrating Feeder	2017	Varies	None
201-260	054E	Vibrating Conveyor	2017	Varies	None
201-270	036C	#5 Bucket Elevator	2017	Varies	Platinum Dust Collector (151-13-1)
201-306	036C	Bucket Elevator #4	1966	Varies	Platinum Dust Collector (151-13-1)

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the “West Virginia Air Pollution Control Act” or the “Air Pollution Control Act” mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The “Clean Air Act” means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. “Secretary” means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary’s designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NO_x	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM_{2.5}	Particulate Matter less than 2.5 µm in diameter
C.F.R. or CFR	Code of Federal Regulations	PM₁₀	Particulate Matter less than 10µm in diameter
CO	Carbon Monoxide	Ppb	Pounds per Batch
C.S.R. or CSR	Codes of State Rules	Pph	Pounds per Hour
DAQ	Division of Air Quality	Ppm	Parts per Million
DEP	Department of Environmental Protection	Ppm_v or ppm_v	Parts per Million by Volume
dscm	Dry Standard Cubic Meter	PSD	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	Psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower	SO₂	Sulfur Dioxide
lbs/hr	Pounds per Hour	TAP	Toxic Air Pollutant
LDAR	Leak Detection and Repair	TPY	Tons per Year
M	Thousand	TRS	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	TSP	Total Suspended Particulate
MDHI	Maximum Design Heat Input	USEPA	United States Environmental Protection Agency
MM	Million	UTM	Universal Transverse Mercator
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	VEE	Visual Emissions Evaluation
MMCF/hr or mmcf/hr	Million Cubic Feet per Hour	VOC	Volatile Organic Compounds
NA	Not Applicable	VOL	Volatile Organic Liquids
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*

2.4. Term and Renewal

- 2.4.1. This permit supersedes and replaces previously issued Permit R13-2384. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Applications R13-2384, R13-2384A, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 10.3.]
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by

improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1.]

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] *[State Enforceable Only]*
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary

exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language;
 2. The result of the test for each permit or rule condition; and,
 3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded

in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

- 3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§4. State Enforceable Only.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by email as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:
Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

DAQ Compliance and Enforcement¹:
DEPAirQualityReports@wv.gov

US EPA:
Associate Director
Office of Air Enforcement and Compliance Assistance
(3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status Reports, Initial Notifications, etc.

3.5.4. Operating Fee

- 3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal

requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

- 3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

- 4.1.1. Natural gas combustion emissions from the Fluid Bed Dryer (Equipment ID No. 101-350, Emission Point ID No. 046C), shall not exceed the amounts given below:

Pollutant	(lb/hr)	(ton/yr)
CO	0.96	4.20
NO _x	0.45	1.97
PM	0.02	0.10
SO ₂	0.002	0.01
VOC	0.02	0.07

- 4.1.2. Controlled process emissions from the Fluid Bed Dryer (Equipment ID No. 101-350, Emission Point ID No. 046C) shall not exceed the amounts given below:

Pollutant	(lb/hr)	(ton/yr)	(mg/dscm)
HCl	0.29	1.27	210
HNO ₃	-----	-----	70
PM	1.83	8.02	57 ⁽¹⁾
NO _x	1.96	8.60	----
(1) NSPS Subpart UUU [40 CFR §60.732 (b)].			

- 4.1.3. Particulate Matter emissions from the Fluid Bed Dryer (Emission Point ID No. 046C) shall be controlled by the Dryer Dust Collector (Control Device ID No. 301-310).
- 4.1.4. The Dryer Dust Collector shall maintain a pressure drop across the system within a normal operating range of 2 to 6 inches H₂O. This requirement applies only while the particulate matter emission sources which vent through this dust collector are emitting PM. Compliance with this requirement shall be verified by calendar daily pressure drop readings, averaged on a calendar monthly basis.
- 4.1.5. Nitric acid emissions from the Nitric Acid Storage Tank (Equipment ID No. 201-38, Emission Point ID No. T72E) shall not exceed 140 mg/dscm.
- 4.1.6. All nitric acid emissions generated during the filling of the Nitric Acid Storage Tank shall be controlled by a vapor return line.
- 4.1.7. Natural gas combustion emissions from the No. 4 Calciner (Equipment ID No. 201-28, Emission Point ID 034E) shall not exceed the amounts given below:

Pollutant	(lb/hr)	(ton/yr)
CO	0.12	0.50
NO _x	0.14	0.60
PM	0.01	0.05
VOC	0.01	0.03

- 4.1.8. The permitted facility shall comply with all applicable provisions of 45CSR16, which, by incorporation, subjects the facility to the provisions of 45 CSR 60, Subpart UUU – Standards of Performance for Calciners and Dryers in Mineral Industries. Provided, however, that compliance with any more stringent limitation set forth under Section 4.1. of this permit, shall also be demonstrated.

- 4.1.9. [Reserved]
- 4.1.10. The opacity of the Dryer Dust Collector shall not exceed 10 percent.
[40 CFR §60.732 (b)]
- 4.1.11. [Reserved]
- 4.1.12. Nitric acid emissions from the Mother Liquor Charge Tank (Equipment ID No. 201-82C, Emission Point ID No. 055E) shall not exceed 70 mg/dscm, 0.07 lb/hr and 0.32 ton/yr.
- 4.1.13. Hydrochloric acid emissions from the Mother Liquor Charge Tank shall not exceed 210 mg/dscm, 0.07 lb/hr, and 0.32 ton/yr.
- 4.1.14. Particulate matter emissions combined from the Extrudate Dump Hopper, Screener #3, Bucket Elevator #3 and Extrudate Feed Hopper (Equipment ID Nos. 201-20, 201-22, 201-23 and 201-24; Emission Point ID No. 031C) shall not exceed 0.58 lb/hr and 2.54 ton/yr.
- 4.1.15. Emissions from Emission Point ID No. 031C shall be controlled by the Non-Platinum Dust Collector (Control Device ID No. 201-43-1).
- 4.1.16. The Non-Platinum Dust Collector shall maintain a pressure drop across the system within a normal operating range of 3 to 9 inches H₂O. This requirement applies only while the particulate matter emission sources which vent through this dust collector are emitting PM. Compliance with this requirement shall be verified by calendar daily pressure drop readings, averaged on a calendar monthly basis.
- 4.1.17. Emissions combined from Impregnation Vessels A, B, C, D, E and F (Equipment ID Nos. 201-25A, 201-25B, 201-25C, 201-25D, 201-25E and 201-25F; Emission Point ID No. 054E) shall not exceed those listed in the following table:

Pollutant	(lb/hr)	(ton/yr)	(mg/dscm)
HCl	0.03	0.13	210
HNO ₃	0.03	0.13	70
PM	0.87	3.81	-----

- 4.1.18. Particulate matter emissions combined from the #5 Bucket Elevator, Calciner Feed Hopper, Bucket Elevator #4, Screener #4 and Final Product Hopper & Product Packaging Station (Equipment ID Nos. 201-270, 201-28H, 201-306, 201-56 and 201-35; Emission Point ID No. 036C) shall not exceed 0.36 lb/hr and 1.59 ton/yr.
- 4.1.19. Emissions from Emission Point ID No. 036C shall be controlled by the Platinum Dust Collector (Control Device ID No. 151-13-1).
- 4.1.20. The Platinum Dust Collector shall maintain a pressure drop across the system with a normal operating range of 3 to 9 inches H₂O. This requirement applies only while the particulate matter emission sources which vent through this dust collector are emitting PM. Compliance with this requirement shall be verified by calendar daily pressure drop readings, averaged on a calendar monthly basis.
- 4.1.21. Controlled process emissions from the No. 4 Calciner (Equipment ID No. 201-28, Emission Point ID No. 034S) shall not exceed the emission limits listed below:

Pollutant	(lb/hr)	(ton/yr)	(mg/dscm)
HCl	0.29	1.27	420

HNO ₃	-----	-----	140
PM	0.36	1.59	92 ⁽¹⁾
NO _x	2.17	9.50	-----
(1) NSPS Subpart UUU [40 CFR §60.732 (a)].			

- 4.1.22. Process emissions from the No. 4 Calciner shall be controlled by the No. 4 Scrubber (Control Device ID No. 201-28S).
- 4.1.23. The No. 4 Scrubber shall maintain a minimum 1.1 inches of water column pressure drop and maintain a 80 to 120% of 12 gpm scrubbing liquor flow rate, as established during the initial performance test pursuant to the requirements of 40 CFR Part 60 Subpart UUU (§60.735(c)(2), §60.735 (c)(3), and §60.736 (c). This requirement applies only while the No. 4 Calciner is emitting PM. Compliance with this requirement shall be verified by an arithmetic average over a 2-hour period of pressure drop and scrubbing liquor flow readings, recorded as a calendar daily average.
- 4.1.24. *[Reserved]*
- 4.1.25. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. [45CSR§7-3.1.]
- 4.1.26. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to subsection 5.1 is required to have a full enclosure and be equipped with a particulate matter control device. [45CSR§7-3.7.]
- 4.1.27. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of this rule. [45CSR§7-4.1.]
- 4.1.28. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 45-7B found at the end of this rule. [45CSR§7-4.2.]
- 4.1.29. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable. [45CSR§7-5.1.]
- 4.1.30. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter

suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment. [45CSR§7-5.2.]

- 4.1.31. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions. [45CSR§7-8.2.]
- 4.1.32. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in this rule may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. [45CSR§7-9.1.]
- 4.1.33. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance.
[45CSR§13-6.1.]
- 4.1.34. For cause, the Secretary may request the owner or operator of a stationary source to install stack gas monitoring devices the Secretary deems necessary to determine continuing compliance. The data from such devices shall be readily available for review at the source location or other reasonable location that the Secretary may specify. At the request of the Secretary, the data shall be made available for inspection or copying and the Secretary may require periodic submission of excess emission reports.
[45CSR§13-6.2.]
- 4.1.35. The Secretary may suspend or revoke a permit or general permit registration if, after (6) months from the date of issuance, the holder of the permit cannot provide the Secretary, at the Secretary's request, with written proof of a good faith effort that construction, modification, or relocation, if applicable, has commenced. Such proof shall be provided not later than thirty (30) days after the Secretary's request. If construction or modification of a stationary source is discontinued for a period of eighteen (18) months or longer, the Secretary may suspend or revoke the permit or general permit registration.
[45CSR§13-10.2.]
- 4.1.36. The Secretary may suspend or revoke a permit or general permit registration if the plans and specifications upon which the approval was based or the conditions established in the permit are not adhered to. Upon notice of the Secretary's intent to suspend, modify or revoke a permit, the permit holder may request a conference with the Secretary in accordance with the provisions of W. Va. Code § 22-5-5 to show cause why the permit or general permit registration should not be suspended, modified or revoked.
[45CSR§13-10.3.]
- 4.1.37. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in

this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11.]

4.2. Monitoring Requirements

- 4.2.1. For the purpose of determining compliance with the 10% opacity limit set forth in 40 CFR §60.732(b) and the 20% opacity limit set forth in 45CSR§§7-3.1 and 7-3.2, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission points and equipment subject to an opacity limit.

Monitoring shall be conducted initially at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. After three consecutive monthly readings in which no visible emissions are observed from any of the subject emission points, those emission points will be allowed to conduct visible emission checks or opacity monitoring once per calendar quarter. If visible emissions or opacity are observed during a quarterly monitoring from an emission point(s), then that emission point(s) with observed emissions or opacity shall be required to revert to monthly monitoring. Any emission point that has reverted to monthly monitoring shall be allowed to again conduct quarterly visible emissions checks or opacity monitoring only after three consecutive monthly readings in which no visible emissions are observed from the subject emission point.

These checks shall be conducted by personnel trained in the practices and limitations of 40 CFR 60 Appendix A, Method 9 or Method 22, or 45CSR§7A, during periods of normal operation of emission sources that vent from the referenced emission points for a sufficient time interval to determine if there is a visible emission. For observations of visible emissions from any emission point(s) which follows a water scrubber, when condensed water vapor is present in the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which condensed water vapor is no longer visible; the observer shall record the approximate distance from the emission outlet to the point in the plume at which the observations are made.

If visible emissions are identified during the visible emission check, or at any other time regardless of operations, the permittee shall conduct an opacity reading using the procedures and requirements of 45CSR§7A within seventy-two (72) hours of the first signs of visible emissions. A 45CSR§7A evaluation shall not be required if the visible emission condition is corrected within seventy-two (72) hours after the visible emission and the sources are operating at normal conditions.

Records shall be maintained documenting the date and time of each visible emission check, the name of the responsible observer, the results of the check, and, if necessary, all corrective actions taken. Should an opacity reading be required per 45CSR§7A, records shall be maintained per the procedures of 45CSR§7A-2.

- 4.2.2. To determine compliance with Sections 4.1.4., 4.1.16. and 4.1.20., the permittee shall measure the system pressure drop and compare it to the baseline value. This shall be continuously monitored and there shall be an alarm indicating a pressure drop out of range. Corrective measures shall be taken immediately upon an alarm. The date and time of each pressure drop out of range and the corrective action taken shall be recorded.

- 4.2.3. To demonstrate compliance with Section 4.1.23., the permittee shall measure the scrubbing liquor flow rate and static pressure drop and compare such rates to the baseline values in the manner as prescribed in 40 CFR Part 60, Subpart UUU.

4.3. Testing Requirements

- 4.3.1. To determine compliance with the mineral acid concentration limits set forth in Sections 4.1. - 2., - 4., -12, -13, -17 and -21, the permittee shall perform stack tests upon the request by the Director under the authority given in Section 4.1.31. [45CSR§7-8.1.] and according to the methods set forth in 45CSR7A.
- 4.3.2. To determine compliance with the particulate matter emissions limits set forth in Sections 4.1.14. and 4.1.18., the permittee shall perform stack tests upon request by the Director or a duly authorized representative of the Director.
- 4.3.3. An initial stack performance test to determine particulate matter concentration for the Dryer Dust Collector shall be conducted in accordance with NSPS Subparts A (40 CFR 60.8) and UUU (40 CFR §§60.732 and 60.735).

4.4. Recordkeeping Requirements

- 4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
- a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
- 4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
- a. The equipment involved.
 - b. Steps taken to minimize emissions during the event.
 - c. The duration of the event.
 - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
 - f. Steps taken to correct the malfunction.
 - g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
- 4.4.4. To determine compliance with CO, NO_x, SO₂ and VOC limits set forth in Section 4.1.1., the permittee shall keep records of the amount of natural gas combusted with the Fluid Bed Dryer. This information may be used in conjunction with appropriate emission factors from EPA's Compilation of Air Pollutant Emission Factors AP-42 Fifth Edition, Volume 1, Supplement D: Stationary Point and Area Sources (AP-42), Chapter 1.4. to determine hourly and yearly emissions.
- 4.4.5. To determine compliance with mineral acid and particulate matter mass emission limits set forth in Sections 4.1. - 2., -4., -12, -13, -17 and -21, the permittee shall perform calculations utilizing results of tests (see Section 4.3.1.) which determined the concentration of such mineral acid along with volumetric flow rate of the appropriate stack (at dry standard conditions), by tank charging calculations and AP-42 emission estimates for tanks, or by engineering calculation, where applicable.
- 4.4.6. To determine compliance with Section 4.1.6., the permittee shall ensure that during all filling times there will be a vapor return line linking the two vessels from and to which the material is being transferred.
- 4.4.7. To determine compliance with the emission limits set forth in Section 4.1.7., the permittee shall keep records of the amount of natural gas consumed in the No. 4 Calciner. These records shall be used in conjunction with appropriate emission factors from AP-42, Chapter 1.4. to determine hourly and yearly emissions.
- 4.4.8. All data and information required to be recorded or obtained under the terms of this permit shall be maintained in a permanent form suitable for inspection and shall be retained for at least five (5) years following the date of the record or report. All such data and information shall be submitted in accordance with the terms of this permit or made available to the Director upon request or during any facility inspection by an authorized representative of the Director.

4.5. Reporting Requirements

- 4.5.1. All reports required under the conditions of this permit shall be forwarded to the Director as specified in Section 3.5.3. of this permit.
- 4.5.2. The permittee shall keep records and submit written, semiannual reports of Dryer Dust Collector opacity exceedances, and Calciner No. 4 Scrubber water column pressure drop and liquid flow rate exceedances as defined in NSPS Subpart UUU (40 CFR §§60.732 and 60.735).

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature¹

(please use blue ink)

Responsible Official or Authorized Representative

Date

Name & Title

(please print or type)

Name

Title

Telephone No. _____

Fax No. _____

¹ This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.